

In the Claims:

Please amend the claims as follows.

1. (original) An apparatus comprising:
a signal generator adapted to generate a positioning signal comprising a first half-field and a second half-field;
wherein each of the first and second half-fields comprises 313 segments; and
wherein each of the segments comprises 832 chips comprising an American Television Standards Committee (ATSC) digital television (DTV) segment synchronization signal and a pseudonoise sequence; and
a transmitter adapted to transmit the positioning signal.
2. (original) The apparatus of claim 1, wherein the pseudonoise sequence comprises a portion of at least one of the group consisting of:
a rotated version of the ATSC DTV field synchronization signal; and
a Global Positioning System L5 code.
3. (original) The apparatus of claim 1, wherein a user terminal receives the positioning signal and determines the location of the user terminal based on the positioning signal.
4. (original) The apparatus of claim 1, wherein the segments are generated at a segment rate, further comprising:
a modulator adapted to modulate at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a further pseudonoise sequence having a chip rate corresponding to the segment rate.
5. (original) The apparatus of claim 1, wherein the further pseudonoise sequence comprises a portion of at least one of the group consisting of:
a rotated version of the ATSC DTV field synchronization signal; and
a Global Positioning System L5 code.

6. (original) The apparatus of claim 1, wherein the half-fields are generated at a half-field rate, further comprising:

a modulator adapted to modulate at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a binary data stream having a bit rate corresponding to the half-field rate.

7 – 8 (canceled)

9. (original) An apparatus comprising:

signal generator means for generating a positioning signal comprising a first half-field and a second half-field;

wherein each of the first and second half-fields comprises 313 segments; and

wherein each of the segments comprises 832 chips comprising an American Television Standards Committee (ATSC) digital television (DTV) segment synchronization signal and a pseudonoise sequence; and

transmitter means for transmitting the positioning signal.

10. (original) The apparatus of claim 9, wherein the pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the ATSC DTV field synchronization signal; and

a Global Positioning System L5 code.

11. (original) The apparatus of claim 9, wherein a user terminal receives the positioning signal and determines the location of the user terminal based on the positioning signal.

12. (original) The apparatus of claim 9, wherein the segments are generated at a segment rate, further comprising:

modulator means for modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a further pseudonoise sequence having a chip rate corresponding to the segment rate.

13. (original) The apparatus of claim 9, wherein the further pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the ATSC DTV field synchronization signal; and
a Global Positioning System L5 code.

14. (original) The apparatus of claim 9, wherein the half-fields are generated at a half-field rate, further comprising:

modulator means for modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a binary data stream having a bit rate corresponding to the half-field rate.

15 – 16 (canceled)

17. (original) A method comprising:

generating a positioning signal comprising a first half-field and a second half-field; and
transmitting the positioning signal;

wherein each of the first and second half-fields comprises 313 segments; and

wherein each of the segments comprises 832 chips comprising an American Television Standards Committee (ATSC) digital television (DTV) segment synchronization signal and a pseudonoise sequence.

18. (original) The method of claim 17, wherein the pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the ATSC DTV field synchronization signal; and
a Global Positioning System L5 code.

19. (original) The method of claim 17, wherein a user terminal receives the positioning signal and determines the location of the user terminal based on the positioning signal.

20. (original) The method of claim 17, wherein the segments are generated at a segment rate, further comprising:

modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a further pseudonoise sequence having a chip rate corresponding to the segment rate.

21. (original) The method of claim 17, wherein the further pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the 511-chip field synchronization signal; and
a Global Positioning System L5 code.

22. (original) The method of claim 17, wherein the half-fields are generated at a half-field rate, further comprising:

modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a binary data stream having a bit rate corresponding to the half-field rate.

23. (canceled)

24. (original) Computer-readable media embodying instructions executable by a computer to perform a method comprising:

generating a positioning signal comprising a first half-field and a second half-field; and
transmitting the positioning signal;

wherein each of the first and second half-fields comprises 313 segments; and

wherein each of the segments comprises 832 chips comprising an American Television Standards Committee (ATSC) digital television (DTV) segment synchronization signal and a pseudonoise sequence.

25. (original) The media of claim 24, wherein the pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the ATSC DTV field synchronization signal; and
a Global Positioning System L5 code.

26. (original) The media of claim 24, wherein a user terminal receives the positioning signal and determines the location of the user terminal based on the positioning signal.

27. (original) The media of claim 24, wherein the segments are generated at a segment rate, wherein the method further comprises:

modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a further pseudonoise sequence having a chip rate corresponding to the segment rate.

28. (original) The media of claim 24, wherein the further pseudonoise sequence comprises a portion of at least one of the group consisting of:

a rotated version of the 511-chip field synchronization signal; and
a Global Positioning System L5 code.

29. (original) The media of claim 24, wherein the half-fields are generated at a half-field rate, wherein the method further comprises:

modulating at least one of the group consisting of the first half-fields and the second half-fields of the positioning signal using a binary data stream having a bit rate corresponding to the half-field rate.

30 – 80 (canceled)